

Claims

1. A method for secure data transmission in selling products, wherein a product selection terminal (10) as well as counter means (20) comprising a document reading station (22), and a product delivery storage (30) are provided, and wherein at the product selection terminal (10) a product is selected and a document (16) for the selected product is output by means of a printing device (14),
5 characterized in

that said document (16) is provided with a first self-checking encryption code (P) and with a first algorithm (f_1 , f_2) for encrypting a product identification of the selected product or the selling identification of a selling process, wherein one or
10 more selling identifications are provided on said document,

that said encryption on said document (16) is identified (decrypted) at the document reading station (22), wherein the value associated to said product is detected and forwarded to said counter means (20) for balancing the value
15 (payment),

that after the payment of said product said counter means (20) delivers an electronic information carrier (26) by means of an output device (24) connected thereto, wherein said electronic information carrier includes a CPU (28) generating a second self-checking encryption code (P') having any encryption depth by means
20 of a second algorithm (f'_1 , f'_2) for encrypting all the products being paid, wherein said second encryption code is different from or even the same as the first encryption code, and

that said electronic information carrier (26) is supplied to a reading unit (32) in said product delivery storage (30) in order to identify and to decrypt said second encryption code (P'), wherein in case of an authorized identification the delivery of
25 the selected product (34) in the selected quantity from the product delivery storage (30) is started.

2. The method for secure data transmission in selling products according to claim 1, characterized in that said output device (24) includes a CPU (28')
30 generating said second self-checking encryption code (P') by means of a second or

the same algorithm (f_1 , f_2 , f_1 , f_2) for encrypting the products being paid, wherein said electronic information carrier (26') is provided as a passive memory and wherein a PIN is additionally inserted.

5 3. The method for secure data transmission in selling products according to claim 1 or 2, characterized in that in a variation said first algorithm (f_1 , f_2) does not represent an encryption algorithm and thus no encryption of said document (16) is applied.

10 4. The method for secure data transmission in selling products according to any of the preceding claims, characterized in that an encrypted data transmission between said product delivery (30) and said product delivery terminal (10) is provided.

15 5. The method for secure data transmission in selling products according to any of the preceding claims, characterized in that said data transmission between the individual zones comprising the product selection zone (1), the counter zone (2) and the product delivery zone (3) is established by means of information carriers and/or devices operating by means of printing engineering, radio engineering, lighting engineering or magnetically.